

# TITLE V APPLICATION REVIEW

## Steel Storage Tank Manufacturing

**Facility #:** C-847                      **Proc. Engineer:** Brian J. Johnson  
**Project #:** 970319                   **Date of Review:** 03/06/98  
**Date Deemed Complete:** 04/24/97

**Facility Name:** Modern Welding Company, Inc.  
**Mailing Address:** 4141 N. Brawley Ave.  
Fresno, CA 93722

**Contact Person:** Richard Reis  
**Phone:** (209) 275-9353

**Responsible Official:** Bob Bartlett  
**Title:** Vice President and Manager

### **I. PROPOSAL**

Modern Welding Company is proposing that initial Title V permits be issued for their existing steel storage tank manufacturing operation located in Fresno, CA. The purpose of this evaluation is to determine if the facility will comply with all applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

### **II. FACILITY LOCATION**

The Modern Welding Company operation is located at 4141 N. Brawley Ave. in Fresno, California.

### **III. EQUIPMENT LISTING**

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories that describe the insignificant activities or equipment at the facility not requiring a permit are shown in Attachment B. This equipment is not exempt from facility-wide requirements.

#### **IV. MODEL GENERAL PERMIT TEMPLATE USAGE**

The applicant has submitted TQF SJV-UM-0-0 for the Title V facility-wide umbrella permit (C-847-0-1). The TQF has been properly signed and dated, and is valid for all Title V sources.

Issues addressed in the approved District templates are not repeated in this evaluation. The conditions from the template are incorporated directly into this evaluation.

#### **V. SCOPE OF EPA AND PUBLIC REVIEW**

Segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA and Public review:

Conditions 1-39 of the requirements for permit unit C-847-0-1;

#### **VI. APPLICABLE REQUIREMENTS ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES**

District Rule 1100 - Equipment Breakdown (Last Amended 12/17/92)

District Rule 1160 - Emission Statements (Adopted 11/18/92)

District Rule 2010 - Permits Required (Last Amended 12/17/92)

District Rule 2020 - Exemptions (Last Amended 12/21/94)

District Rule 2031 - Transfer of Permits (Last Amended 12/17/92)

District Rule 2040 - Applications (Last Amended 12/17/92)

District Rule 2070 - Standards for Granting Applications (Last Amended 12/17/92)

District Rule 2080 - Conditional Approval (Last Amended 12/17/92)

District Rule 2520 - Federally Mandated Operating Permits, Sections 5.2, 9.5.1, 9.5.2, 9.6.1, 9.6.2, 9.8, 9.9.1, 9.9.2, 9.9.3, 9.9.4, 9.9.5, 9.10, 9.13.1, 9.14.1, 9.14.2, 9.17, and 10.0 (Adopted 06/15/95)

District Rule 4101 - Visible Emissions (Last Amended 12/17/92)

District Rule 4601 - Architectural Coatings (Last Amended 12/17/92)

District Rule 8020, 8030, and 8060 - Fugitive Dust (PM<sub>10</sub>) Emissions (Last Amended 4/25/96)

40 CFR Part 82 - Subpart F, Stratospheric Ozone

40 CFR Part 61 - Subpart M, National Emission Standard for Asbestos

## **VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY MODEL PERMIT TEMPLATES**

District New and Modified Stationary Source Review Rule (Last Amended 06/15/95)

District Rule 2520; 9.4.2 - Federally Mandated Operating Permits (Last Amended 06/15/95)

District Rule 4201 - Particulate Matter Concentration (Last Amended 12/17/92)

District Rule 4603 - Surface Coating of Metal Parts (Last Amended 5/20/93)

District Rule 4623 - Storage of Organic Liquids (Last Amended 9/19/91)

District Rule 4661 - Organic Solvents (Last Amended 12/17/92) - {Non SIP replacement for Fresno Co. Rule 409}

District Rule 4684 - Polyester Resin Operations (Last Amended 5/19/94)

California Code of Regulations, Title 17, Subchapter 6, §92000 through §92540

40 CFR Part 68 - Chemical Accident Prevention Provisions

**VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE**

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Operating Permit are designated as Federally Enforceable Through Title V Permit.

For this facility, conditions 1-4, and 6 of the requirements for permit units C-847-1-1, and condition 1 of the requirements for permit unit C-847-3-1 are not federally enforceable.

**IX. COMPLIANCE**

**A. Requirements Addressed by Model Permit Templates**

**1. Facility-wide Requirements (C-847-0-1)**

The applicant is proposing to use model permit template SJV-UM-0-0 to address federally applicable facility-wide requirements. Template conditions have been added to the permit as conditions 1-39 to ensure compliance with these requirements. A compliance demonstration has been done in section IV of the template.

**B. Requirements not Addressed by Model Permit Templates**

**1. District New and Modified Stationary Source Review Rule (NSR)**

**a. Shotblast Building (C-847-1-1)**

Abrasive blasting operations are not subject to NSR requirements (see subpart 8 below), therefore all NSR requirements erroneously placed on the ATC and subsequent PTOs have been removed from the current PTO by administrative action. No further consideration of the original permit conditions shall be made.

b. Storage Tank Coating Process (C-847-3-1)

This equipment was subject to NSR when the original ATC (#7130070101) was issued in 1988. Modifications to the NSR conditions on the ATC were made in 1989 and 1990 to increase the amount of resin use, and to change the monomer content of the resin. Although these were NSR permit modifications, no new ATCs were issued. PTO conditions were modified to enforce the requested changes.

- Condition 1 from the ATC, which limited the amount resin usage by the facility, had been removed by a previous district action. The original ATC condition was replaced by a condition that directly limited the amount of VOC emissions from the operation. The NSR emission limit is now enforced by condition 4 of the requirements for permit unit C-847-3-1.
- Condition 2 from the ATC, which limited the monomer content of the resin, had been removed by a previous district action. The original ATC condition was replaced by a condition that directly limited the amount of VOC emissions from the operation. The NSR emission limit is now enforced by condition 4 of the requirements for permit unit C-847-3-1.
- Condition 3 from the ATC has been reworded to reflect current standard nuisance condition language as enforced by condition 1 of the requirements for permit unit C-847-3-1. The condition is not federally enforceable because it is based on the nuisance provisions of the California Health and Safety Code, not a federally applicable requirement.
- Condition 4 from the ATC was written to enforce toxic air contaminant standards as required by the district. The condition was not based on a federally enforceable requirement and has been removed.

**2. District Rule 2520; 9.4.2 - Federally Mandated Operating Permits**

Section 9.4.2 requires that periodic monitoring and/or recordkeeping be performed if none is associated with a given emission limit to ensure compliance. Periodic monitoring and recordkeeping consisting of the retention of daily records of process throughput rate and of maintenance records will be supported by conditions 13, 17, and 18 of the requirements for permit unit C-847-3-1.

### **3. District Rule 4201 - Particulate Matter Emission Rate**

Section 3.1 requires that a source not discharge dust, fumes, or total suspended particulate matter emission in excess of 0.1 gr/dscf.

#### **a. Storage Tank Coating Operation (C-847-3-1)**

The coating operation is performed within two enclosed areas ventilated through fabric filters. Even under moderately heavy PM loading, well designed and operated fabric filter systems have been shown to reduced overall PM emissions to less than 0.010 gr/dscf, and often to less than 0.005 gr/dscf<sup>1</sup>. Permit conditions 20 and 21 ensure that the ventilation system and filters are properly maintained and operated. Permit conditions have also been added to ensure compliance with the emission limit of this rule. See condition 2 of the requirements for permit unit C-847-3-1. Therefore, compliance is expected.

### **4. District Rule 4603 - Surface Coating of Metal Parts**

Section 5.1 prohibits the application of a coating with a VOC content in excess of specified limits. Condition 5 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 5.2 prohibits the application of specialty coating with a VOC content in excess of specified limits. Condition 6 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 5.4.1 prohibits the use of solvents containing more than 200 grams of VOC per liter of material. Condition 7 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 5.4.2 requires that all solvent laden cloth or paper be stored in closed, non absorbent containers. Condition 8 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 5.4.3 requires that all coatings and solvents be stored in closed containers. Condition 9 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 5.4.4 requires the use of an enclosed system for spray equipment cleanup, or equipment proven to be equally effective.

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<sup>1</sup> Page 115, Air Pollution Engineering Manual, Air & Waste Managment Assoc., (a revision of AP-40) 1992.

Condition 10 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 5.5 limits the use of coating application equipment to one of the listed methods. Condition 11 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 5.6 presents the requirement that no person shall solicit, require for use, or specify the application of a coating subject to this rule if such use or application results in a violation of the provisions of this rule. The requirement applies to all written or oral contracts under the terms of which any coating is to be applied to any metal part or product at any physical location within the District. Condition 23 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 6.1 requires the display of maximum VOC content of the coating and statement of the manufacturer's recommendation regarding thinning of the coating. Conditions 12 and 14 of the requirements for permit unit C-847-3-1 ensure compliance with this prohibition.

Section 6.2 requires the permittee to maintain records of the volume of coating and solvent used. Condition 13 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

Section 6.2.3 requires all records be maintained and made available for inspection for the previous 24 month period. This requirement has been superseded by the requirement of section 9.5.2 of District Rule 2520 which requires retention of records for five years. See condition 9 of the facility-wide requirements (C-847-0-1).

Section 6.3 specifies the test methods to be used in quantifying the VOC content of coatings, VOC emission rates, and VOC capture efficiency. In addition, this section presents methods to be used in the quantification of coating as a metallic/iridescent topcoat, for the determination of the acid content of primers, and for the determination of emissions of VOCs from spray gun cleaning systems. Condition 14 of the requirements for permit unit C-847-3-1 ensures compliance with this prohibition.

## **5. District Rule 4623 - Storage of Organic Liquids**

The control requirements of Section 5.0 of this rule apply to floating and fixed roof (vented) organic liquid storage tanks with a capacity of

19,800 gallons or greater. The capacity of all organic liquid storage tanks at this facility is less than 19,800 gallons. Therefore, this operation is not subject to the control requirements of the rule. Furthermore, Condition 8 of the requirements for permit unit C-847-3-1 ensures that all VOC containing materials are stored in closed containers.

## **6. District Rule 4684 - Polyester Resin Operations**

The purpose of this rule is to reduce emissions of volatile organic compounds from polyester resin operations. The provisions of this rule apply to commercial and industrial polyester resin operations.

Section 5.1 lists the process and control requirements. These requirements include section 5.1.1 which mandates the use of one of four listed operational techniques to control VOC emissions. The facility has chosen to use low VOC and vapor-suppressed polyester resin options described in section 5.1.1. In addition, section 5.1.2 limits the methods usable for the spray application of resin to airless, air assisted airless, HVLP, or electrostatic spray equipment. Conditions 15 and 16 of the requirements for permit unit C-847-3-1 ensure compliance with these requirements.

Section 5.2 includes a limit for cleaning materials of 1.7 pounds of VOC per gallon, and the exceptions to this limit. Condition 19 of the requirements for permit unit C-847-3-1 ensures compliance with this requirement.

Section 5.3 describes storage and disposal requirements. Conditions 8 and 9 of the requirements for permit unit C-847-3-1 ensure compliance with these requirements.

Section 6.1 lists the recordkeeping requirements, including, daily records of the type and quantity of all resins, catalysts, and cleaning materials used in each operation; records of the VOC content, in weight percent, of all polyester resin materials used or stored at the facility; records of the VOC content of all cleaning materials; and records of hours of operation and key operating parameters for any add-on control equipment. Condition 17 of the requirements for permit unit C-847-3-1 ensures compliance with this requirement.

Section 6.2 describes the methods for analysis of the cleaning materials, polyester resin materials, and control efficiency. Section 6.2.3 requires the use of ASTM D2369-87 or SCAQMD Test Method 312 for determining the monomer content of uncatalyzed resin



material. Section 6.2.4 requires the use of EPA Method 24 to determine the VOC content of cleaning materials. Condition 18 of the requirements for permit unit C-847-3-1 ensures compliance with this requirement.

**7. District Rule 4661 and Fresno Co. Rule 409 - Organic Solvents**

This facility is exempt from the requirements of these rules. The facility qualifies for an exemption listed under Rule 409 section 3, article B, and Rule 4661 section 4.2, which grants an exemption from the provisions of the rule when other applicable requirements specified are applicable. The facility is required to comply with District Rule 4603, which has subsumed County Rule 409.4. Therefore, both the current District Rule 4661 and the Fresno Co. Rule 409 are not applicable.

**8. California Code of Regulations, Title 17, Subchapter 6, §92000 through §92540**

Pursuant to the California Health and Safety Code (CH&SC) §41900, the air pollution standards for abrasive blasting operations are set statewide by a committee formed in accordance with §41901. CH&SC §41904 states that "The standards shall be statewide, and no rule or regulation of any district that is applicable to sandblasting operations shall be stricter or less strict than the standards adopted by the state board pursuant to the recommendations of the committee".

The only federally applicable requirement for the abrasive blasting operation at this facility (C-847-1-1) is §92200, which requires confined blasting operation to limit visible emissions to no more than 20% opacity or equivalent Ringelmann 1. Condition 5 of the requirements for permit unit (C-847-1-1) requires compliance with this requirement.

**9. 40 CFR Part 68 - Chemical Accident Prevention Provisions**

The requirements of this provision mandates that the subject facility submit to the proper authority a Risk Management Plan. Permit Condition 40 of the facility-wide requirements (C-847-0-1) requires compliance with this provision.

**X. PERMIT SHIELD**

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Operating Permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

**A. Requirements Addressed by Model General Permits**

By submitting model general permit template SJV-UM-0-0 the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shield as granted in the model general permit template, is included as conditions 38 and 39 of the facility-wide requirements (C-847-0-1).

**B. Requirements not Addressed by Model General Permits**

The applicant is requesting a permit shield for each of the requirements listed below.

**1. District Rule 4603 - Surface Coating of Metal Parts**

Compliance with this requirement was addressed in section IX of this document and is ensured by conditions 5-14 of the requirements for permit unit C-847-3-1. Therefore, a permit shield is being granted for this requirement in condition 22 of the requirements for permit unit C-847-3-1.

**2. District Rule 4684 - Polyester Resin Operations**

Compliance with this requirement was addressed in section IX of this document and is ensured by conditions 8, 9, and 15-19 of the requirements for permit unit C-847-3-1. Therefore, a permit shield is being granted for this requirement in condition 22 of the requirements for permit unit C-847-3-1.

**3. District Rule 4661 and Fresno County Rule 409 - Organic Solvents**

Compliance with both of these rules was addressed in section IX of this document. Therefore, a permit shield is being granted for these requirements in condition 22 of permit unit C-847-3-1.

**XI. PERMIT CONDITIONS**

See draft permits beginning on the next page.

**XII. EPA AND PUBLIC COMMENTS**

See Attachment D.